PRECONDITIONING INTEGRATED CIRCUIT FOR INTEGRATED CIRCUIT TESTING

ABSTRACT OF THE DISCLOSURE

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A test system is configured to include a preconditioning integrated circuit that is coupled between automatic test equipment (ATE) and a device-under-test (DUT). The preconditioning integrated circuit is configured to precondition signals that are communicated to and from the device-under-test, and particularly, to precondition high-frequency signals so as to avoid the adverse affects caused by long lead lines between the automated test equipment and the device-under-test. The preconditioning integrated circuit is designed to provide direct contact with the device-under-test, thereby providing very short lead lines to the device-under-test. High-frequency signals that are communicated to the device-under-test are generated, or reformed, at the preconditioning integrated circuit, based on control signals, or other test signals, from the automated test equipment. High-frequency, or time-critical, signals that are received from the device-under-test are processed and/or reformed by the preconditioning integrated circuit, for subsequent transmission to the automated test equipment.